

ABSTRACT OF THE DISCLOSURE

This disclosure provides an array substrate for use in an IPS-LCD device which includes substantially zigzag-shaped pixel and common electrodes. The pixel electrodes and the common electrodes are connected with a connecting line and the common line, respectively. However, if each pixel and common electrode forms an acute angle with each connecting and common lines, liquid crystal molecules are strangely rotated and produce extraordinary domains in the intersection when the voltage is turned ON. Moreover, disclination occurs around the intersection. In order to overcome these problems, substantially sawtooth-shaped bases are employed of where the pixel and common electrodes meet the connecting and common lines, respectively. So each electrode forms an obtuse angle with each respective line, and thus the rotational direction of the liquid crystal molecules are the same in regions of the pixel area when the voltage is supplied. Accordingly, disclination is prevented, and the aperture ratio and the response characteristic are improved.